

WARREN CHARLES BODEKER, A CITIZEN OF U.S.A.

8594 HIWAY 200

PLAINS, MONTANA 59859

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TITLE OF INVENTION

[[WEEDEVADER]]

TILLING AND WEEDING DEVICE

CROSS-REFERENCE TO RELATED APPLICATIONS [[(NOT APPLICABLE)]]

(INSERT 1)

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR
DEVELOPMENT (NOT APPLICABLE)

REFERENCE TO SEQUENCE LISTING, A TABLE, OR A COMPUTER PROGRAM
LISTING COMPACT DISK APPENDIX (NOT APPLICABLE)

BACKGROUND OF THE INVENTION

It is generally the assumption that all garden weeding must include bending over, kneeling, backache, and pain. Thus the consistent goal of mankind has been to invent tools to eliminate hard work and pain. Much has been achieved in many fields of labor, yet we are still in the Stone Age when it involves gardening or landscaping. Now, at last,

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Warren Charles Bodeker Application # 10/691.018 Art Unit 3671
Title: "Tilling and Weeding Device."

INSERT 1

U.S. Patent Documents

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|---------------------|-------------------|----------------------------|
| <u>1,025,693</u> | <u>05/07/1912</u> | <u>C. W. FRANKLIN</u> |
| <u>2,312,569</u> | <u>03/02/1943</u> | <u>J. MAGA</u> |
| <u>2,651,159</u> | <u>09/08/1953</u> | <u>J. G. ROUNTREE, SR.</u> |
| <u>2,745,331</u> | <u>05/15/1956</u> | <u>L. LANCOUR</u> |
| <u>2,891,369</u> | <u>06/23/1959</u> | <u>E. L. RIETZ</u> |
| <u>3,080,697</u> | <u>03/12/1963</u> | <u>D. A. MAURO</u> |
| <u>3,243,944</u> | <u>04/05/1966</u> | <u>E. D. MICHAUD</u> |
| <u>4,213,504</u> | <u>07/22/1980</u> | <u>F. A. SCHNEIDER</u> |
| <u>4,280,565</u> | <u>07/28/1981</u> | <u>VAN DER LELY</u> |
| <u>4,286,675</u> | <u>09/01/1981</u> | <u>TUGGLE</u> |
| <u>4,293,041</u> | <u>10/06/1981</u> | <u>HOLMSTADT</u> |
| <u>4,501,332</u> | <u>02/26/1985</u> | <u>STRAAYER</u> |
| <u>4,715,173</u> | <u>12/29/1987</u> | <u>ANDERSON</u> |
| <u>4,862,682</u> | <u>09/05/1989</u> | <u>WAIT, ET AL</u> |
| <u>4,911,247</u> | <u>03/27/1990</u> | <u>KUHLMANN, ET AL.</u> |
| <u>5,056,605</u> | <u>10/15/1991</u> | <u>BOND, ET AL.</u> |
| <u>5,257,666</u> | <u>11/02/1993</u> | <u>C. E. TOWNSEND, JR.</u> |
| <u>5,491,963</u> | <u>02/20/1996</u> | <u>O. JEREZ</u> |
| <u>5,988,292</u> | <u>11/23/1999</u> | <u>J. W. KNOTTS</u> |
| <u>6,340,061 B2</u> | <u>01/22/2002</u> | <u>MARSHALL, ET AL.</u> |

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there is a tool (a soil invading disk) that attaches to power-driven implements so you can standup and weed most areas around the house and garden. This new tool provides shallow soil invasion in very close to plants eliminating most weeds. The design of the tool is basically a flat disk that rotates parallel with the ground and has protruding lugs that invade the soil. When attached to a power-driven implement this tool eliminates most bending and kneeling while weeding. The goal of this invention is to keep a garden almost weed free, stop the pain and labor currently associated with gardening, control the depth of soil invasion, have a minimum of soil and plant disturbance, conserve water and minerals, encourage the use of battery powered implements to reduce air and noise pollution, and to open gardening to the elderly and infirm.

(INSERT 2)

BRIEF SUMMARY OF THE INVENTION

[[The subject invention is a disk-shaped tool for garden weeding. This tool may be attached to various existing power-driven implements for to its own custom-designed implements (not part of this invention).]]

(INSERT 3)

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

Fig. 1 is a top view of the disk. Line 10 is the disk. Line 16 is the center hole for attaching disk to power-driven implement. Line 20 is the open hole left when lugs are punched out to protrude on the underside of the disk. Fig. 2 is a side view of the disk. Line 10 is the disk. Line 14 is the protruding lugs. Line 18 is the alternate shaft for attaching the disk to a power-driven implement. Fig. 3 is another view of the disk showing the lugs Line 14.

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Title: "Tilling and Weeding Device".

INSERT 2

Many gardening cutting blades, stringed devices, and horizontally rotating disks and bars have been patented for over 90 years; some are wheel mounted; some are hand-held; most are just patented concepts that have not been built nor marketed because they are not economically feasible. Further, most of these patented gardening devices have been anticipated by some former inventor and yet they received a patent; for example, U.S. Patent #2,654,159 issued Sept 8, 1953 to J. G. Rountree, SR, a horizontally rotating disk type lawn mower, which was clearly anticipated by U.S. Patent #3,080,697 issued Mar 12, 1953 to D. A. Mauro; U.S. Patent #2,745,331 issued May 15, 1956 to L. Lancour, for a horizontally rotating disk type cutter; U.S. Patent #4,501,332 issued Feb 26, 1985 to Robert O. Straayer, is a horizontally rotating disk type garden tool; U.S. Patent #5,056,605 issued Oct 15, 1991 to Bond, et al, is a horizontally rotating disk type cutting tool. Bond's cutting tool is very dangerous to the operator and all surrounding good or usable vegetation. The blades are sharp and protrude beyond the edge of the disk and cannot weed or till in close to plants. Fig. 1, member 42, in Bond's Patent is a cutting blade set generally at a 90-degree angle to the disk with another 90-degree angle partway down the blade such that a sharp edge of the blade extends outward and parallel to the disk. The present invention is an improvement and far superior to Bond's cutting tool. Even after 14 years, Bond's cutting tool is still not on the market. None of the referenced Patents nor others individually or collectively teach or make obvious the economical one-step manufacturing process nor do they employ the floating disk concept for shallow cultivating up close to the plants as taught by the present invention.

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INSERT 3.

The present invention is a horizontally rotating disk for garden weeding and cultivating. The said disk may be attached to various power-driven implements. Said disk is superior to all previously patented gardening disks, in that the design of said disk allows it to float on top of the soil, not having a tendency to dig in as do the other bladed disks and bars. Said disk has the lugs inset 1/2-inch from the edge thereby allowing said disk to weed close to plants.

One of the great advantages of the present invention is its simple design, whereby, it can be stamped out as a complete tool in a one-step manufacturing process, making it very economical to produce and market. Of the many horizontally rotating disk or blade devices that have been patented and issued to date, none of these are available to the general public, as the cost of manufacturing these various complicated devices is prohibitive.